RAYEVSKAYA, E.S.; ZHUK, I., red.; VOSKRESENSKAYA, T., red.;
NEZNANOV, V., mladshiy red.; NOGINA, N., tekhn. red.

[Studies on the history of economic thought in Hungary]
Ocherki istorii ekonomicheskoi mysli Vengrii. Moskva, Sotsekgiz, 1962. 211 p. Translated from the Hungarian.
(Hungary---Economics) (MIRA 15:9)

KISHSH, Tibor [Kiss, Tibor]; GEYGER, B.Ya.[translator]; RAYEVSKAYA, E.S.[translator]; SIKACHEV, I.N.[translator]; SKVORTSOVA, A.I.[translator]; ALEKSEYEV, I.G., red.; OL'SEVICH, Yu Ya., red.; KHAR'KOVSKAYA, L.M., tekhn. red.

[Economic cooperation of socialist countries] Ekonomicheskoe sotrudnichestvo sotsialisticheskikh stran. Moskva, Izd-vo inostr. lit-ry, 1963. 194 p. Translated from the Hungarian. (MIRA 17:3)

VASIL'TSOV, V.D.; VOLCHENKO, M.Ya.; GERTSOVICH, G.B., kand.ekon. nauk; ZHARKOV, Ye.I.; KONOVALOV, Ye.A., kand. ekon. nauk; MATVIYEVSKAYA, E.D.; OLEYNIK, I.P., kand. ekon. nauk; RAYEVSKAYA, E.S.,; SKVORTSOVA, A.I.; SOKOLOVA, N.V.; SOTNIKOVA, I.A.; TANDIT, V.S.; TRIGUBENKO, M.Ye.; FIRSOVA, Yu.V.; SHABUNINA, V.I.; YUKHT., M.N.; STOROZHEV, V.I., kand. istor. nauk, red.; LEPNIKOVA, Ye., red.; SMIRNOV, G., tekhn. red.

[Economy of the people's democracies in figures for 1960] Ekonomika stran sotsialisticheskogo lageria v tsifrakh 1960 g. Pod red. G.B.Gertsovicha, I.P.Oleinika, V.I.Storozheva. Moskva, Izd-vo sotsial'no-ekon. lit-ry, 1961. 238 p. (MIRA 15:4)
(Communist countries—Economic conditions)

[illegible], G. A.

USSR/Medicine - Blood Pressure, High May 1948
Medicine - Heart, Diseases

"Special Features of the Course and Prognosis of Infarct of the Myocardium in Hypertonic Cases," G. A. Rayevskaya, Faculty Therapeutics Clinic, Med Inst of Ministry of Pub Health RSFSR; Inst of Consultation on Work Capacity, 2 pp

"Sov Meditsina" No 5

Infarct of the myocardium is more frequent and severe among hypertonic cases. Frequency is due to coronary sclerosis, often associated with hypertonic disease. Severity is due to considerable hypertrophia of the heart, among hypertonics, which facilitates onset of cardiac defect. 76174

RAYEVSKAYA, G.A.;ARKHANGEL'SKAYA, N.V.

Acute lupus erythematosus. Sovet. med. 16 no.12:22-26 Dec 1952.
(CLML 23:4)

1. Of the Faculty Therapeutic Clinic (Director -- Prof. P. Ye. Lukomskiy) of the Pediatric Faculty of Second Moscow Medical Institute imeni I. V. Stalin and of the Pathologico-Anatomic Division (Scientific Supervisor -- Prof. Ya. L. Rappoport), First Municipal Hospital.

RAYEVSKAYA, G.A.

Dicoumarin therapy of myocardial infarct. Sovet. med. 17 no.7:16-18 July 1953. (CIML 25:1)

1. Of the Hospital Therapeutic Clinic (Director -- Prof. P.Ye. Lukomskiy), Second Moscow Medical Institute imeni I. V. Stalin.

RAYEVSKAYA, G.A., doktor meditsinskikh nauk

Thromboembolic complications in the pulmonary artery in myocardial infarct. Sov.med. 20 no.9:16-22 S '56. (MLRA 9:11)

1. Iz kafedry gospital'noy terapii (zav. prof. P.Ye.Lukomskiy) lechebnogo fakul'teta II Moskovskogo meditsinskogo instituta imeni I.V.Stalina)

(MYOCARDIAL INFARCT, compl.
thromboembolism of pulm. artery)
(THROMBOEMBOLISM
pulm. artery, caused by myocardial infarct)
(ARTERIES, PULMONARY, dis.
thromboembolism, caused by myocardial infarct)

RAYEVSKAYA, G.A., doktor meditsinskikh nauk

Cerebral circulatory disorders in myocardial infarct. Sov.med. 21 no.5:45-49 My '57. (MLRA 10:7)

1. Iz gospital'noy terapevticheskoy kliniki (dir. - prof. P.Ye. Lukomskiy) II Moskovskogo meditsinskogo instituta imeni I.V.Stalina.

(MYOCARDIAL INFARCT, compl.
brain circ. disord.)
(BRAIN, blood supply
disord. in myocardial infarct)

RAYEVSKAYA, G.A., doktor med.nauk (Moskva)

Treatment of myocardial infarct with anticoagulants. Klin.med. 36 no.8:54-60 Ag '58 (MIRA 11:9)

1. Iz kafedry gospital'noy terapii (zav. - prof. P.Ye. Lukomskiy) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.

(MYOCARDIAL INFARCT, ther.
bishydroxycoumarin & ethyl biscoumacetate (Rus))
(BISHYDROXYCOUMARIN, ther. use
myocardial infarct (Rus))
(ETHYL BISCOUMACETATE, ther. use
same (Rus))

RAYEVSKAYA, G.A.

Clinical aspects and pathogenesis of postinfarction syndrome. Kardiologiia 4 no.4:37-42 Jl-Ag '64 (MIRA 19:1)

1. Kafedra gospital'noy terapii (zav. - deystvitel'nyy chlen AMN SSSR prof. P. Ye. Lukomskiy) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova. Submitted March 20, 1964.

VAL'DMAN, V.A., zasl. deyatel' nauki RSFSR, prof.; ZAMYSLOVA, K.N., prof.; IL'INSKIY, B.V., prof.; KURSHAKOV, N.A.; LUKOMSKIY, P.Ye., prof.; MYASNIKOV, A.L., prof.; MOLCHANOV, N.S., prof.; RAYEVSKAYA, G.A., prof.; TEODORI, M.I., kand. med. nauk; CHERNOGOROV, I.A., prof.; TAREYEV, Ye.M., prof., otv. red.; OSTROVERKHOV, G.Ye., prof., glav. red.; SHAPIRO, Ya.Ye., prof., red. toma; LYUDKOVSKAYA, N.I., tekhn. red.

[Multivolume manual on internal diseases] Mnogotomnoe rukovodstvo po vnutrennim bolezniam. Otv . red. E.M.Tareev. Moskva, Izd-vo "Meditsina." Vol.2. [Diseases of the cardiovascular system] Bolezni serdechno-sosudistoi sistemy. Red. toma A.L. Miasnikov. 1964. 614 p. (MIRA 17:3)

1. Deystvitel'nyy chlen AMN SSSR (for Tareyev, Myasnikov, Lukomskiy, Molchanov). 2. Chlen-korrespondent AMN SSSR (for Kurshakov).

RAYEVSKAYA, G.A., prof.

Clinical aspect of berylliosis. Nauch.trudy Chetv.Mosk.gor.klin. bol'. no.1:329-334 '61. (MIRA 16:2)

1. Iz gospital'noy terapevticheskoy kliniki 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta imeni N.I. Pirogova (zav. klinikoy - prof. P.Ye. Lukomskiy) i Moskovskoy gorodskoy klinicheskoy bol'nitsy (glavnyy vrach - G.F. Papko).
(BERYLLIUM—TOXICOLOGY)

RAYEVSKAYA, G.A., prof.; KAZ'MINA, P.V.

Allergic polyserositis in myocardial infarction. Sov.med. no.3: 24-30 '62. (MIRA 15:5)

1. Iz gospital'noy terapevticheskoy kliniki (dir. - prof. P.Ye. Lukomskiy) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.
(HEART--INFACTION) (ALLERGY)
(SEROUS MEMBRANES--INFLAMMATION)

RAYEVSKAYA, G.A., prof.; SAVENKOV, P.M., assistent

Systemic lupus erythematosus. Sov.med. 25 no.1:8-15 Ja '62.
(MIRA 15:4)

1. Iz gospital'noy terapevticheskoy kliniki (dir. - chlen-korrespondent AMN SSSR prof. P.Ye.Lukomskiy) II Moskovskogo gosudarstvennogo meditsinskogo instituta imeni N.I.Pirogova.
(LUPUS ERYTHEMATOSUS)

RAYEVSKAYA, G.A., prof.

C-reactive protein and fibrinogen in the blood in patients with myocardial infarct. Sov.med. 25 no.4:16-22 Ap '61.
(MIRA 14:6)

1. Iz gospital'noy terapevticheskoy kliniki (dir. - prof. P.Ye. Lukomskiy) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.
(HEART--INFARCTION) (PROTEINS) (FIBRINOGEN)

RAYEVSKAYA, G.A., prof.; SHALEVICH, M.A.

Clinical aspects of interstitial pulmonary fibrosis. Terap.arkh. 32 no.11:14-21 N '60. (MIRA 14:1)

1. Iz gospital'noy terapevticheskoy kliniki (dir. - prof. P.Ye. Lukomskiy) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova i prozektury (prozektor - prof. Ya.L. Rappoport) 4-y Gorodskoy klinicheskoy bol'nitsy.
(PULMONARY FIBROSIS)

RAYEVSKAYA, G.A., prof.; SORES, T.S.

Aldolase of the blood in patients with myocardial infarct.
Sov.med. 24 no.12:29-32 D '60. (MIRA 14:3)

1. Iz kafedry gospital'noy terapii (zav. - prof. P.Ye. Lukomskiy) lechebnogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.
(HEART—INFARCTION) (ALDOLASE)

RAYEVSKAYA, Galina Aleksandrovna; KALININA, N.V., red.; ROMANOVA, Z.A., tekhn. red.

[Thromboembolic complications in patients with myocardial infarct] Tromboembolicheskie oslozhneniia u bol'nykh infarktom miokarda. Moskva, Gos.izd-vo med. lit-ry Medgiz, 1960. 131 p. (MIRA 14:5)

(HEART--INFARCTION) (THROMBOSIS) (EMBOLISM)

RAYEVSKAYA, M., domokhozyayka; KISHKINA, G.; PANARIN, K.; PROKOF'ICHEV, A., personal'nyy pensioner

Improve sanitary conditions in Chelyabinsk. Zhil.-kom. khoz. 10 no.5:18-19 '60. (MIRA 13:10)

1. Zaveduyushchaya sanitarnym otdelom gorodskoy sanitarno-epidemiologicheskoy stantsii, g.Chelyabinsk (for Kishkina). 2. Predsedatel'-postoyannoy komissii po kommunal'nomu khozyaystvu ispolkoma Soveta deputatov trudyashchikhsya Traktorozavodskogo rayona, g.Chelyabinsk (for Panarin).
(Chelyabinsk--Refuse and refuse disposal)

RAYEVSKAYA M.A.

YUR'YEV, B.N., akademik, zam. predsedatel'ya; DANILEVSKIY, V.V., deystvitel'nyy chlen, redaktor; NIKOLAYEV, D.S., inzhener; RAYEVSKAYA, M.A., inzhener; VOYTINSKAYA, D.M., bibliograf-redaktor.

[History of technology; bibliographical index of the year 1949] Istoriia tekhniki. Bibliograficheskii ukazatel', 1949. Moskva, Izd-vo Akademii nauk SSSR, 1952. 199 p. (MLRA 6:7)

1. Komissiya po istorii tekhniki, otdeleniye tekhnicheskikh nauk Akademii Nauk SSSR (for Yur'yev). 2. Akademiya Nauk Ukrainskoy SSR (for Danilevskiy). (Technology--Bibliography) (Bibliography--Technology)

YEREMEYEVA, S.I.; VINOKUR, M.M.; NIKOLAYEV, D.S.; RAYEVSKAYA, M.A.; KAUFMAN, I.M., red.; CHERNYAK, A.Ya., red.; KUZNETSOV, B.G., prof., nauchnyy red.; KHELEMSKAYA, L.M., tekhn. red.

[Great physicists of the world; a bibliography] Vydaiushchiesia fiziki mira; rekomentadtl'nyi ukazatel'. Moskva, 1958. 435 p. (MIRA 11:8)

1. Moscow. TSentral'naya politekhnicheskaya biblioteka.
(Bibliography--Physicists)

USSR/General Biology - General Histology.

RAYEVSKAYA, M.A.

Abs Jour : Ref Zhur - Biol., No 8, 1958, 33349

Author : Raevskaya, M. A.

Inst :

Title : Histophysiological Investigations of Epithelial Tissue. (Gistofiziologicheskie issledovaniya epitelialnoy tkani).

Orig Pub : Uch. zap. Leningr. gos. ped. in-ta, 1956, 19, 141-151

Abstract : Morphological and functional properties of the irridescent [?] epithelium of frogs and rabbits were studied in vitro by the method of vital staining combined with additional irritation by isotonic solutions of KCl and $CaCl_2$. In some experiments the epithelium was first subjected to high temperature (37°) or precooled to low (0°) temperature. It was established that through action of isotonic solutions of KCl and $CaCl_2$ on undamaged tissue, a complex of paranecrotic changes develops, as described by D.N. Nasonov. However,

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KOGAN, B.S.; KRASNOV, B.I.; RAYEVSKAYA, M.A.; CHIRKOVA, L.P.; YARTSEVA, L.A.; SHUKHARDIN, S.V., red.; UL'YANOVA, O.G., tekhn. red.

[History of technology; a bibliography of works published in 1956] Istoriia tekhniki; bibliograficheskii ukazatel' 1956. Pod red. S.V.Shukhardina. Moskva, Izd-vo Akad. nauk SSSR, 1963. 141 p. (MIRA 16:7)
(Bibliography--Technology)

ROGEL'BERG, I.L., inzhener.

"Metals and thermal treatment. Bibliographical guide." M.I.Mishkina, M.A.Raevskaia. Reviewed by I.L.Rogel'berg. Vest.mash. 34 no.3:102-105 Mr '54. (MLRA 7:4)

(Bibliography--Metals) (Metals--Bibliography)
(Mishkina, M.I.) (Raevskaia, M.A.)

AID P - 2833

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 22/30

Author : Rayevskaya, M. A., Chief Bibliographer of the Central Library of the Polytechnical Institute

Title : Development of informative bibliography (Letters and observations)

Periodical : Elektrichestvo, 6, 81, Je 1955

Abstract : The author complains that the Institute of Scientific Information of the Academy of Sciences of the USSR has not issued a single bibliographical reference publication on the field of electrical engineering, and references in other sciences (physics, mechanics etc.) are intolerably late in appearing, usually not less than a year after the publication of the books on the subject. There are very few such publications published in a limited number by some other institutions and universities should start serious work

AID P - 2833

Elektrichestvo, 6, 81, Je 1955

Card 2/2 Pub. 27 - 22/30

in that neglected field.

Institution : None

Submitted : No date

MASTYAYEV, N.Z.; OKLOV, I.N. Prinimala uchastiye RAYEVSKAYA, M.N.; YUFEROV, F.M., dots., retsenzent; LARIONOV, A.N., prof.,red.[deceased]

[Hysteresis motors] Gisterezisnye elektrodvigateli; posobie dlia diplomnogo i kursovogo proektirovaniia. Moskva, MEI, Pt.1. [Theory and applicati s] Voprosy teorii i primeneniia. 1963. 221 p. (MIRA 16:12)

1. Moskovskiy energeticheskiy institut (for Yuferov). 2. Chlen-korrespondent AN SSSR (for Larionov).

(Electric motors)

6.5200
18.1142

67286
SOV/180-59-4-19/48

AUTHOR: Rayevskaya, M.N. (Moscow)

TITLE: Metal Magnetic Carriers for Recording

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1959, Nr 4, pp 114-123 (USSR)

ABSTRACT: The author discusses the desired properties of metal magnetic wire and strip for sound recording. It has been shown (Ref 1) that some properties of magnetic sound-carriers can be improved by increasing the ratio of coercive force to the value of the remanence. The author's present work deals with the development of new recording materials with good magnetic, electro-acoustic and mechanical properties, on the basis of the system Fe-Cr-Ni. The first part of the work was on a micro-wire with a coercive force over 200 oersted and remanence over 2000 gauss, made of Fe-Cr-Ni alloys alloyed with titanium, molybdenum, tantalum or niobium. The main test alloys were prepared by induction melting followed by holding in a vacuum or argon-atmosphere pouring to prevent precipitation of non-metallic inclusions. Ingots were forged into 36 x 36 mm billets for rolling into 8 mm diameter rod. After heat treatment the rod was drawn to

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Metal Magnetic Carriers for Recording

micro-wire. The mechanical and magnetic properties were determined for various degrees of reduction: Fig 3 shows plots of the tensile strength of Fe-Cr-Ni alloys with Ti, Mo, Nb or Ta, and Fig 4 plots of the tensile strength remanence and coercive force for Fe-Cr-Ni-Mo. It was found that the best magnetic and mechanical properties were shown by Fe-Cr-Ni alloys with titanium or molybdenum; study of electro-acoustic properties at the Vsesoyuznyy nauchno-issledovatel'skiy institut zvukozapisi (All-Union Scientific Research Institute for Sound Recording) showed the latter to be preferable. In the second part of the work the possibility of obtaining better alloys with various ratios of coercive force to remanence was studied. It was found that no significant improvement is obtained by additions to Fe-Cr-Ni of calcium, magnesium, cerium, boron, vanadium or zirconium. Partial deformation at -150 to -160°C gave good magnetic properties (H_c = 330 to 360 oersted and B_r = 3600 to 3700 gauss) but this is difficult to effect reliably. Tempering for 2 seconds to 20 hours at 300 to 600°C was investigared; Fig 5 and 6 show the magnetic properties plotted against tempering temperature.

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Metal Magnetic Carriers for Recording

for wires of Fe-Cr-Ni-Ti and Fe-Cr-Ni-Mo alloys, respectively, Fig 7 and 8 giving the corresponding curves together with tensile-strength curves for Fe-Cr-Ni-Mo in relation to tempering temperature of the rod and for the rod before final drawing, respectively. These curves show that considerable improvements can be obtained by suitable treatment. The results of electro-acoustic tests for 0.09 mm diameter wire are shown in Fig 9 (dependence of output voltage and nonlinear distortion coefficient on recording current), Fig 10 (the same on demagnetizing current) and Fig 11 (frequency characteristics). Fig 12 to 14 show corresponding curves for 0.05 mm diameter wire. Under best conditions the following properties were obtained for 0.09 mm diameter wire 400 to 600 oersted coercive force with a remanence of 6000 to 2500 gauss, demagnetized noise level 44 to 48 decibels, magnetized noise level 44 to 47 decibels; for 0.05 mm diameter wire the corresponding figures are 450 to 700 oersted at 800 to 2500 gauss, 46 to 49 and 45 to 49 decibels. Finally, the author describes work on metallic magnetic tape 20 to 50 microns thick. Fe-Cr-Ni-Mo alloys of different

Metal Magnetic Carriers for Recording

compositions were rolled after quenching in water. Rolling with high degrees of reduction per pass gave reduced remanence (Table 2); with higher overall reduction the remanence rose and coercive force fell (Table 3). With preheating to 100°C before rolling, remanence fell and coercive force rose somewhat (Table 4). Rolling at -190°C gives reduced coercive force and increased remanence. The magnetic properties and thickness of metallic and organic-based tape are summarized in Table 4 and the electro-acoustic properties in Table 6. The properties of some of the metallic tapes were superior to those of an organic-based one (Table 5). There are 14 figures and 6 tables. 4 References are numbered in the text but none are given.

SUBMITTED: April 1, 1959

4

Card 4/4

L 17795-63 EWP(k)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pf-4/Pad JD/HW
JG/MLK(a)

ACCESSION NR: AP3006721 S/0286/63/000/007/0007/0007

AUTHOR: Rayevskaya, M. N.

TITLE: Method of microwire production. Class 7, No. 153708

SOURCE: Byul. izobret. i tovarn. znakov, no. 7, 1963, 7

TOPIC TAGS: iron chromium nickel molybdenum alloy microwire, magnetic hard alloy microwire, microwire production, microwire heat treatment, microwire drawing, microwire reduction

ABSTRACT: An Author Certificate has been issued for a method of producing Fe-Cr-Ni-Mo magnetically hard alloy microwire. To improve the magnetic, electroacoustic, and mechanical properties of the wire after annealing and cold deformation with high reduction, it is aged at a low temperature and drawn with 10—40% reduction. These operations can be repeated several times.

ASSOCIATION: none
SUBMITTED: 15Jun59 DATE ACQ: 30Sep63 ENCL: 00
SUB CODE: ML NO REF SOV: 000 OTHER: 000
Card 1/1

30670

S/137/61/000/010/037/056
A006/A101

9,2300 (1160, 1164)

AUTHOR: Rayevskaya, M.N.

TITLE: Microwire for sound and pulse recording

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 10, 1961, 16, abstract 10I123 ("Sb. tr. Tsentr. n.-i. in-t chernoy metallurgii", 1960, no. 23, 248 - 262)

TEXT: The author studied the effect of technological factors on the magnetic and mechanical properties of microwire of 0.03-0.09 mm in diameter, made of Cr-Ni-Mo-Fe alloy. It was established that for sound recording it is expedient to use microwire of 0.09 and 0.05 mm in diameter with H_c 300 - 700 oersted at B_r 8000 - 2500 gs; for pulse recording it is recommended to employ 0.05 and 0.03 mm diameter wire with $H_c \geqslant 600$ oersted and $B_r \geqslant 1800$ gs.

T. Fedorova

[Abstracter's note: Complete translation]

Card 1/1

S/776/62/000/025/020/025

AUTHOR: Rayevskaya, M. N.

TITLE: Deformable hard magnetic alloys based on the Fe-Ni-Mn system.

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Sbornik trudov. no. 25. Moscow, 1962. Pretsizionnyye splavy. pp. 283-297.

TEXT: This paper comprises a state-of-the-art report and the description of an experimental investigation designed to find C-free alloys of systems not comprising large quantities of expensive elements, such as Co, Mo, et al., with high-grade magnetic properties. In the present investigation, binary Fe-Ni alloys with 0-30% Ni and ternary Fe-Ni-Mn alloys lying in the Fe corner of the phase diagram, with an Ni content from 4-20% and an Mn content from 3-12%, were studied. In addition, the investigation covered the effect on the magnetic properties of Fe-Ni-Mn alloys with 9-12% Mn and 3-8% Ni of the alloying with a fourth component, Ti, Ta, Nb, Mo, Al, and V. The investigation of the magnetic properties was performed after cold working and heat treatments according to various regimes. The individual investigation of the magnetic properties are detailed in graphs and microstructural photographs. The following inexpensive C-free alloys are proposed for industrial

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Deformable hard magnetic alloys based on S/776/62/000/025/020/025

use: Three alloys comprising 11.5-12.5% Mn and 3-4% Ni, plus: (1) 2.6-3.2% Mo, having magnetic properties, after cold working with a reduction of 90-95% and anneal, of H_c 200-210 ϕ, B_r 7,500-8.500 gauss; (2) 1.7-2.3% Ti, with H_c 160-180 ϕ B_r 7,500-8,500 gauss; (3) 0.8-1.2% Mo and 1.2-1.7% Ti, with H_c 170-180 ϕ, B_r 7,500-8,500 gauss. The properties of these alloys can be further improved through an intermediate anneal after a reduction of 75-80%. The stability of the magnetic properties in the T interval from −150 to +250°C constitutes an advantage of the alloys developed here over high-Co steels with analogous properties. These alloys are recommended for the making of magnetic needles, rotors of fractional-kw electrical machines, and other parts. There are 12 figures, 1 table, and 32 references (4 Russian-language Soviet, 11 German, 1 French, 16 English-language).

Card 2/2

RAYEVSKAYA, M.N.

Investigating the effect of cobalt and copper on the magnetic properties and structure of deformable, magnetically hard Fe-Ni-Al-Nb alloys. Sbor. trud. TSNIICHM no.25:268-282 '62.
(MIRA 15:6)

(Iron-nickel-aluminum alloys--Testing)

RAYEVSKAYA, M.N.

Deformable, magnetically hard alloys on an Fe-Ni-Mn base. Sbor. trud. TSNIICHM no.25:283-297 '62. (MIRA 15:6)
(Iron-nickel-manganese alloys--Magnetic properties)

RAYEVSKAYA, M.N.

Microwire for recording sound and pulses. Sbor.trud.TSNIICHM no.23:248-262 '60. (MIRA 13:7)
(Recording instruments)

RAYEVSKAYA, M.N.

New materials for rotors in hysteresis motors. Sbor.trud. TSNIICHM no.23:263-283 '60. (MIRA 13:7)
(Alloys--Magnetic properties) (Electric motors)

PHASE I BOOK EXPLOITATION SOV/5995

Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Institut pretsizionnykh splavov

Pretsizionnyye splavy (Precision Alloys) Moscow, Metallurgizdat, 1960. 295 p. (Series: Its: Sbornik trudov, vyp. 23) Errata slip inserted. 2,525 copies printed.

Additional Sponsoring Agency: USSR. Gosudarstvennaya planovaya komissiya.

Ed.: D.I. Gabriyelyan; Ed. of Publishing House: Ya.I. Levit; Tech. Ed.: Ye.B. Vaynshteyn.

PURPOSE: This book is intended for engineers and scientific personnel in the metallurgical, instrument-production, and electrical-equipment industries, as well as for industrial personnel engaged in the production of precision alloys. It may also be useful to students attending advanced technical schools.

COVERAGE: The articles in this collection present the results of investigations conducted in recent years by the Central Scientific Research Institute of Ferrous Metallurgy (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii). The articles deal with industrial techniques of producing soft magnetic alloys, properties and structure of the alloys at extremely low temperatures and in high-frequency magnetic fields, deformation textures, magnetostriction, the galvanomagnetic effect, volume changes, etc. Some articles are concerned with the investigation of deformed hard magnetic alloys. No personalities are mentioned. The articles are accompanied by references, both Soviet and non-Soviet.

AVAILABLE: Library of Congress

Card 6/6

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RAYEVSKAYA, M.N.

Materials for rotors of hysteresis motors. Nauch.dokl.vys.shkoly; elektromekh.i avtom. no.1:215-226 '58. (MIRA 11:11)
(Electric motors, Alternating current)

137-58-1-1791

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 244 (USSR)

AUTHORS; Livshits, B G ; Rayevskaya, M N

TITLE Malleable Magnetically Retentive Alloys Based on Iron-nickel-aluminum (Deformiruyemyye magnitotverdyye splavy na zhelezonikel'alyuminiyevoy osnove)

PERIODICAL Sb. tr. Tsentr. n.-i. in-t chernoy metallurgii, 1956, Nr 15, pp 360-396

ABSTRACT In an effort to discover inexpensive malleable alloys for permanent magnets having high magnetic qualities, the following alloys with reduced Al content were melted in an induction furnace, rolled into foil 1 5-10 mm in thickness, and studied. Ni 15-30, Al 0-15, and also an alloy with 15-25 Ni and 5-10 Al, with supplementary alloying by Nb, Zr, Ti, Va, and B. It was found that alloys containing not over 9 percent Al are capable of deformation in the 1200-850°C interval. Ti and Nb increase the coercive force of Ni-Al-Fe alloys up to 550 Oe with a B_s=5000 gauss (Nb) and 380 Oe at 6350 gauss (Ti). These alloys may be machined by hard alloy cutters. In the highly coercive state the alloy consists of finely dispersed β and β' phases, the β phase being in the form

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137-58-1-1791

Malleable Magnetically Retentive Alloys Based on Iron-Nickel-Aluminum

of isolated particles in the β' phase. An alloy containing added Nb also contains a third phase, Fe_2Nb. In alloys containing Ti, the latter is completely dissolved, and no titanides are formed. Bibliography: 10 references.

Ya.P.

1. Permanent magnets--Determination 2. Iron nickel aluminum alloys--Applications

Card 2/2

NAGORSKAYA, N.D.; MOLCHANOVA, L.V.; RAYEVSKAYA, M.V.; NOVOSELOVA, A.V.; FRIDLYANDER, I.N.; YATSENKO, K.P.; ROGOVA, L.K.

Crystallization in the system Be - Nb. Metalloved. i term. obr. met. no. 6:12-15 Je '64. (MIRA 17:7)

KUTERGIN, V.A., kand.tekhn.nauk; RAYEVSKAYA, N.G., kand.tekhn.nauk

Infiltration of water into the soil in furrow irrigation.
Nauch. zap. MIIVKH 19:144-163 '57. (MIRA 15:3)
(Irrigation)

RAYEVSKAYA, N.G.

KUTERGIN, V.A., kandidat tekhnicheskikh nauk; RAYEVSKAYA, N.G., kandida' tekhnicheskikh nauk.

Quality of furrow irrigation of plowed crops. Gidr. i mel. 6 no.8: 42-50 Ag '54. (MLRA 7:9)
(Irrigation)

RAYEVSKAYA, N. T.

Mammary Glands

Study of secretion of mammary glands for the diagnosis of brucellosis. Sov. med. 16 no. 3, 1952

Monthly List of Russian Accessions, Library of Congress, August, 1952. Unclassified.

KAYEVSKAYA, N. T., Doc Med Sci, "Pregnancy and bru-cellosis." Alma-Ata, 1961. (Kazakh State Med Inst). (KL, 3-61, 228).

RAYEVSKAYA, N.T.

Study of breast secretion for diagnosis of brucellosis. Sovet. med. 16 no.3:13-15 Mar 1952. (CIML 22:1)

1. Of the Obstetric-Gynecological Clinic (Director -- Prof. A. A. Kogan) and of the Infectious Clinic (Director -- Prof. A. L. Katsenovich), Tashkent Medical Institute imeni V. M. Molotov.

24(3)

AUTHOR: Blayevskaya, M. N. SOV/48-23-3-1/34

TITLE: Investigation of the Structure of New Deformable Magnetically Hard Alloys (Issledovaniye struktury novykh deformiruyemykh magnitotverdykh splavov)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya fizicheskaya, 1959, Vol 23, Nr 3, pp 266-270 (USSR)

ABSTRACT: In the investigation dealt with by the present paper the alloy with 25% Ni, 9% Al, which was additionally alloyed with niobium, was selected for the investigation of the structure and the properties of isotropic Fe-Ni-Al-Nb-alloys. It may be concluded from a comparison of the experimental results obtained that the maximum coercive force of the Fe-Ni-Al-Nb-alloys corresponds to highly dispersed states. The heterogeneity of the structure becomes visible with a 4000-5000 fold magnification. The finely dispersed mixture consists of two phases. In the alloy the ordered β'-phase rich in Ni-Al is in a highly compressed state. The β-phase rich in iron is in a stretched state because the decomposition products maintain the matrix lattice and exist coherently. The highly coercive force of isotropic Fe-Ni-Al-Nb-alloys may not only be explained by the anisotropic form of the separations since they

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have the form of lamellas and not of needles or cylinders. The anisotropy of the potentials probably plays the main part in the increase of H_c (coercive force). These facts as well as the shape of the magnetization curve (Fig 4) indicate that not only rotation processes take place in the magnetic reversal in Fe-Ni-Al-Nb-alloys but also processes of displacement which are inhibited due to high potentials and high dispersity up to high field strengths. The structures of anisotropic Fe-Co-Ni-Al-Nb-alloys were investigated in thermomagnetically processed samples of alloys with 24% Co, 14% Ni, 7% Al, 3% Cu and 4% Nb as well as with 18% Co, 16% Ni, 9% Al and 4% Nb. The heterogeneity of the alloys was determined by means of electron microscopy and X-ray analysis. In order to be able to draw final conclusions as to the processes taking place in these alloys, further detailed investigations must be carried out. Moreover, alloys with a $\beta \rightarrow \alpha$-transformation are investigated in the present paper. The fine structure of Fe-samples of alloys with 12% Mn, 3% Ni and 3% Mo after deformation by a 90% compression and after annealing at different temperatures was investigated by means of electron microscopy and X-ray analysis. The experimental

investigations were carried out by the L.Yu. Vol'fson, graduate student. At the same time the physical properties of these samples were measured. The microstructure of the alloy in highly coercive state after annealing at 550° (Fig 9) consists of a finely dispersed heterogeneous mixture of α- and γ-phases of almost equal amount. The coercive force and the strength of the Fe-Ni-Mn-alloys are, in contrast to Fe-Co-V-alloys, assumed to be due to different processes. X-ray analyses of the fine structure did not show a relation between the coercive force of the Fe-Ni-Mn-Mo-alloys and the potentials of the second and third type. With these alloys the degree of dispersity and the quantitative relation of the α- and β-phase are apparently responsible for the coercive force. The magnetic properties also depend on the crystallographic texture. The coercive force depends only little on the direction. This indicates the lack of a potential anisotropy. Figures 1, 2, and 3 show the microstructures of Fe-Ni-Al-Nb-alloys; Figures 5, 6, and 7 show the microstructures of the Fe-Co-Ni-Al-Nb-alloys; Figure 8, curves of magnetization and demagnetization; Figure 10 - dependence of the saturation

induction I_s, of the coercive force H_c, of the Rockwell hardness and the amount of the γ'-phase of the annealing temperature for the Fe-Ni-Mn-Mo-alloy. There are 10 figures and 10 references, 7 of which are Soviet.

S/776/62/000/025/019/025

AUTHOR: Rayevskaya, M. N.

TITLE: Investigation of the effect of Cobalt and Copper on the magnetic properties and the structure of deformable hard magnetic Fe-Ni-Al-Nb alloys.

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Sbornik trudov. no. 25. Moscow, 1962. Pretsizionnyye splavy. pp. 268-282.

TEXT: The paper describes an experimental investigation of the properties and structure of Co-containing Fe-Ni-Al-Nb alloys, both isotropic and anisotropic (following thermomagnetic treatment). This work amplifies the investigation of isotropic alloys alone, which had been published by the author, jointly with B. G. Lifshits, in the same sbornik, no. 15, 1956, 360. The investigation yielded the making of Fe-Co-Ni-Al-Nb alloys with magnetic properties that equaled those of the cast Al-Ni-Co and Mg-Ni-Co alloys. The structure and properties of these alloys are investigated. It is determined that only certain types of machining are suitable for these alloys, namely, anodic-mechanical cutting, erosion, and grinding. The present study covered a broad range of alloys which showed that hot rolling of sheets 1-12-mm thick is possible for alloys containing 12-24% Co, 14-20% Ni,

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5-9% Al, and 0-3% Cu, alloyed additionally with Nb. The investigation then covered the magnetic properties of such alloys, to find deformable alloys with satisfactory magnetic properties. An increasing Ni content leads to a growth of the coercive force and reduction of the residual induction. An increase in Co content increases both characteristics and reduces the "critical" rate of cooling in heat treatment that ensures the obtainment of optimum magnetic properties. An increase in Al content increases the coercive force and decreases the residual induction. An addition of 3% Cu increases the coercive force of alloys with any content of the other elements. The residual induction increases if no more than 16% Ni are present in the alloy. Nb, in all alloys investigated, increases the coercive force and reduces the residual induction or leaves it unchanged. The magnetic properties of the deformable alloys in sheet form are listed in detail. Two alloys were selected for structural analysis: (1) 21% Co, 14% Ni, 7% Al, and 3% Cu; (2) 18% Co, 16% Ni, and 9% Al; both are alloyed with Nb. The alloys were quenched from various temperatures, following slow cooling (10°C/hr) from 1,200°, and also in the highly coercive state after thermomagnetic treatment. Optical and electron-microscope investigation, X-ray analysis, and physical tests were performed. The 2 alloys tested are similar in their structure, but the $\beta+\beta'$ transformation for the first alloy begins at a slightly higher T (850-900°). The structural characteristics of the two alloys are listed in detail. The present investigation must be followed by

additional studies before definitive statements can be made on the processes which occur during the remagnetization in anisotropic alloys of the Fe-Co-Ni-Al-Nb system. No definitive statements can be made at this stage on the mechanical workability (machinability) of the alloys. A broad and specific investigation is needed. Parts made of these alloys cannot be stamped, either hot or cold. The cutting of sheets is possible on guillotine-type shears in the heated state (up to 800-1,000°) only, or by the making of parts by electroerosion, anodic-mechanical cutting, and grinding. The alloys cannot yet be recommended for broad industrial utilization. There are 13 figures, 2 tables, and 9 references (6 Russian-language Soviet, 1 German, 2 English-language).

AUTHOR: Rayevskaya, Marianna Nikolayevna, Senior Scientific Assistant at the Scientific Research Institute of Sound Recording

SOV/161 58-1-27/33

TITLE: Rotor Materials for Hysteresis Motors (Materialy dlya rotorov gisterezisnykh dvigateley)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Elektromekhanika i avtomatika, 1958, Nr 1, pp. 215 - 226 (USSR)

ABSTRACT: As was shown by investigations of the author and of other authors a material exhibits its best characteristics near its maximum permeability. The hysteresis loops of earlier developed Fe-Co-V alloys (vikalloy) were studied systematically and new magnetic alloy resistive materials with very good hysteresis properties were found. The hysteresis properties were investigated in fields with 25 - 100 Oe or with 100 - 250 Oe, or in fields with a maximum permeability. The measurements were conducted according to ballistic methods. The area was planimetered. The experiments with Fe-Co-V alloys (52 KF were carried out by Engineer S.S.Gratsianov. These alloys were used as a cold-milled sheet metal of the standardized Fe-Co-V

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alloy (Vikalloy) with a content of 11% of V. It was used in a few designs of hysteresis motors as material for rotors since 1950. The investigations showed, that an application of forged rotors of Fe-Co-V alloys is uneconomical. The Fe-Mn-Ni alloys belong to the cheapest materials and exhibit a coercive force of 100-200 Oe and a residual induction of 11 000 - 8000 Gs in saturated fields, if they are cold-milled and annealed previously. These alloys also are anisotropic, as are Fe-Co-V alloys. A closer investigation of alloys on a Fe-Mn-Ni basis with a varying ratio of the components permitted to choose an alloy with an increased nickel content Fe-Ni-Mn (12 NG). This alloy exhibits valuable magnetic and hysteresis properties in fields of a strength of 25-50 Oe. When alloys with a nickel content are magnetized in weak fields (25 - 50 Oe) they exhibit hysteresis properties higher by 12%. Moreover, the properties are less dependent upon the annealing temperature than are that of Fe-Co-V alloys. When Fe-Mn-Ni alloys with a high manganese as well as with a high nickel content are tested, it appears that they can be used in some motor designs. The characteristics of rotors of gyroscope motors made of an Fe-Ni-Mn alloy (NG) are by no means inferior to that of

motors with rotors from an Fe-Co-V alloy with 11 and 7% V. The Fe-Co-Mo alloys were examined. They are inexpensive and they exhibit high hysteresis properties in fields with 100-200 Oe. Fe-Co-Mo alloys are best suited for motors which necessitate the production of the rotor as one forged piece. The Fe-Co-W-Mo alloys exhibit about the same properties in fields with 60-100 Oe as Fe-Co-W alloys in weak fields. Hence it is indicated to test these alloys in such operational fields instead of the Fe-Co-V alloys. This is especially of importance in cases where the rotor has several poles, as Fe-Co-W-Mo alloys possess an anisotropy considerably smaller than Fe-Co-V alloys. Alloys with 20 and 22% of Ni and with 9% of aluminium were obtained in the investigation of niobium alloys:Fe-Ni-Al-Nb alloy (20 N Yu) and Fe-Ni-Al-Nb (22 N Yu). The materials for rotors of hysteresis motors of different design and with an operational field of 25 - 300 Oe are given in a table. There are 12 figures and 2 tables.

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Rotor Materials for Hysteresis Motors SOV/ 161-58-1-27/33

The publication of this article was recommended by a resolution of the Conference on Hysteresis Motors at the Moscow Institute of Power Engineering held on March 28-29, 1957 (Konferentsiya po gisterezisnym dvigateliyam, provedennoy v MEI 28-29 marta 1957).

ASSOCIATION: NII

SUBMITTED: February 12, 1958

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ACCESSION NR: AP4040687 S/0129/64/000/006/0012/0015

AUTHOR: Nagorskaya, N. D.; Molchanova, L. V.; Rayevskaya, M. V.; Novoselova, A. V.; Fridlyander, I. N.; Yatsenko, K. P.; Rogova, L. K.

TITLE: Crystallization in the Be-Nb system

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 6, 1964, 12-15, and insert facing p. 25

TOPIC TAGS: beryllium niobium system, beryllium niobium alloy, alloy crystallization, alloy structure, alloy phase composition, alloy hardness, niobium beryllide, niobium beryllium solubility

ABSTRACT: Investigation of alloys of the Be-Nb system containing up to 58% Nb showed the existence of three phases: the beryllium base α-phase, the Nb-Be_{12} compound γ-phase, and the $NbBe_{17}$ compound δ-phase. In the alloys containing up to 46% Nb, the α- and γ-phases form a eutectic with a very limited amount of the latter phase. The Vickers hardness of the alloy annealed at 850C for 14 days and water quenched increases from 121 at 0.7% niobium to 1108 at 58% niobium.

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ACCESSION NR: AP4040687

The cast alloy had roughly the same hardness as alloys annealed for 29 days. The Vickers hardness of individual phases (annealed and water quenched) was found to be 110 for the α-phase, 160 for the eutectic, 480 for the γ-phase, and 1060 for the δ-phase. The solid state solubility of niobium in beryllium is low. A considerable amount of $NbBe_{12}$ was found in an alloy containing as little as 0.7% Nb. The eutectic of the α- and γ-phases contains 2.5% Nb. The eutectic temperature is close to the melting temperature of pure beryllium. Alloys of the eutectic and hypoeutectic compositions have a fine structure, but at a certain amount of primary formations of intermetallic compounds, the fine structure disappears. In hypereutectic alloys the structures of the upper and lower parts of ingots are different due to segregation. Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00	ATD PRESS: 3051	ENCL: 00
SUB CODE: MM	NO REF SOV: 004	OTHER: 006

Card 2/2

RAYEVSKAYA, N.T., dotsent

Vitamin C in parturients with brucellosis. Med.zhur.Uzb. no.8-9:67-70 Ag-S '58. (MIRA 13:6)

1. Iz akushersko-ginekologicheskoy kafedry Tashkentskogo gosudarstvennogo instituta usovershenstvovaniya vrachey.
(BRUCELLOSIS) (ASCORBIC ACID) (PREGNANCY)

RAYEVSKAYA, N.T., doktor med. nauk

Basic problems in the study of the pathogenesis and prevention of late toxicosis of pregnancy. Med. zh. Uzbek. 3:3-8 '63 (MIRA 17:2)

1. Iz kafedry akusherstva i ginekologii Tashkentskogo gosudarstvennogo instituta usovershenstvovaniya vrachey.

RAYEVSKAYA, O. G.

USSR/Biology - Molds Sep/Oct 52

"Influence of Cultivation Conditions on the Development of Fat-Producing Molds of the Genus Fusarium," E. V. Litvinova, O. G. Rayevskaya, All-Union Sci Exptl Inst of the Beer-Brewing Ind, Moscow

"Mikrobiologiya" Vol 21, No 5, pp 573-577

States that the mold of the genus Fusarium, obtained from the microflora of birch sap, is a saprophyte and is nontoxic. Its the mycelia and conidia possess great nutritive value and contain a high percentage of fat. According to the article, this

229T3

fat is similar to vegetable oil. This mold is capable of assimilating glucose, saccharose, maltose, xylose, arabinose and, to a lesser deg, lactose. States that Fusarium and its mycelia develop well in sulfite liquor. Notes that the best way to obtain a large number of mycelia with a high fat content is by aeration of the medium. According to the article, the most effective way to increase the growth of the mold is deep submergence and blowing of air through the medium.

229T3

RAYEVSKAYA, O. G.

Dissertation: "The Effect of Interrelated Propagation and Interbreeding on the Vitality of Certain Yeasts of the Family Saccharomyecs." Cand Biol Sci, Inst of Genetics, Acad Sci USSR, Moscow, Oct-Dec 53. (Vestnik Akademii Nauk, Moscow, Jun 54)

SO: SUM 318, 23 Dec 1954

LITVINOVA, Ye.V.; RAYEVSKAYA, O.G.

Beer microflora at various stages of the brewing process. Trudy VNIIPP no.4:17-22 '54. (MLRA 10:1)
(Beer) (Micro-organisms)

VESELOV, I.Ya.; PREOBRAZHENSKIY, A.A.; LITVINOVA, Ye.V.; RAYEVSKAYA, O.G.

Purity of the pitching yeast as a factor in beer stability. Trudy VNIIPP no.4:22-32 '54. (MLRA 10:1)
(Yeast) (Beer)

LITVINOVA, Ye.V.; RAYEVSKAYA, O.G.; MILESHKO, L.F.

Destruction of beer microflora in order to increase the stability of beer. Trudy VNIIPP no.4:32-37 '54. (MLRA 10:1)
(Beer) (Yeast) (Brewing--Bacteriology)

VESELOV, I.Ya.; LITVINOVA, Ye.V.; RAYEVSKAYA, O.G.

Using 131K yeast culture for the production of velvet [dark] beer.
Trudy VNIIPP no.4:48-51 '54. (MLRA 10:1)
(Beer) (Yeast)

RAYEVSKAYA, O.G.

Effect of inbreeding and interbreeding on the viability of certain yeasts of the genus Saccharomyces. Trudy Inst.gen.no.22:218-243 '55. (Yeast) (MIRA 9:4)

KOSIKOV, K.V.; RAYEVSKAYA, O.G.

Adaptation of the yeast Saccharomyces paradoxus to the fermentation of the simple dextrins of malt wort. Trudy Inst.gen.no.23:326-340 '56. (MIRA 10:1)

(Yeast) (Dextrin) (Malt)

RAYEVSKAYA, O. G.

Cleavage of sucrose by maltase in yeast cells. K. V. Kosikov, N. S. Gel'man, and O. G. Raevskaya. *Doklady Akad. Nauk S.S.S.R.* 111, 1359–60(1958).—Tests with *Saccharomyces paradoxus, S. chevalieri, S. chodati, S. heterogenicus, S. globosus,* and *S. prostoserdovi* in 6% sucrose medium showed fermentation proceeding with all these species, with *S. paradoxus, S. chevalieri,* and *S. globosus* being most active. The yeast cells were shown to contain active maltase and invertase, the latter being present in the above 3 species but not in the others. Thus maltase can be apparently adapted by the yeast to fermentation of sucrose. The *S. globosus* used in the work was specially adapted to sucrose and did not ferment maltose. G. M. Kosolapoff

KOSIKOV, K.V.; RAYEVSKAYA, O.G.

Adaptability of yeast to saccharose fermentation. Dokl.AN SSSR 112 no.1:141-143 Ja '57. (MLRA 10:2)

1. Institut genetiki Akademii nauk SSSR. Predstavleno akademikom A.I.Oparinym.
(YEAST) (SUCROSE) (FERMENTATION)

20-119-6-48/56

AUTHORS: Kosikov, K. V., Rayevskaya, O. G.

TITLE: The Influence of the Concentration of a Specific Nutrient Substratum Upon the Variability in Fermentative Properties of Yeast (Vliyaniye kontsentratsii spetsificheskogo substrata na izmenchivost' fermentativnykh svoystv drozhzhey)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6, pp. 1225 - 1228 (USSR)

ABSTRACT: The adaptive variability of organisms is widely spread. Organisms can be obtained experimentally, which are adapted to different, new nutrient sources and which are resistant to toxins. The problem how this variability comes about, is solved in different ways. The investigations performed by the first author since some years on a directed variation of yeast of the species Saccharomyces have shown that under the influence of a specific nutrient substratum in the culture individual cells are produced, which are able to ferment the respective sugar. In the control culture such variations were not observed, which could be explained by the occurrence of spontaneous mutations. The newly produced property of producing an active

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ferment and of fermenting the concerned sugar, remains preserved after removal of this sugar from the milieu (if it was replaced by another sugar). This capability is not only inherited on the occasion of a vegetative, but also on the occasion of a sexual augmentation. The results made assume that the variability of the fermentative properties of microorganisms are connected with their functional state, which is determined by the nutrient medium. For the experiment a culture of Saccharomyces globosus was selected, which was cultivated from a single spore as a dipolide homozygous culture. It could not ferment 2% saccharose. 2 experiments with 1% and 20% saccharose with 0,3% glucose and 5% yeast-autolysate were performed. In the first experiment (table 1) fermentation was determined only in one culture after 46 days. In the second experiment the fermentation began after 6-7 days and took place in 36 of 249 cases. In this way the increase of concentration of saccharose leads to an accelerated adaption of the culture to the fermentation of this sugar. Table 2 shows results of further experiments, which completely confirm the

The Influence of the Concentration of a Specific Nutrient Substratum Upon the Variability in Fermentative Properties of Yeast 20-119-6-48/56

above results. It can be said that the totality of the obtained results not only confirms the former results, but makes assume a dependence of the frequency of occurrence of this variability on the quantity, dissolved in the milieu, of carbon molecules reacting with the cell body. The obtained results cannot be explained by spontaneous mutations. There are 1 figure, 2 tables and 2 references, 2 of which are Soviet.

ASSOCIATION: Institut genetiki Akademii nauk SSSR (Institute of Genetics, AS USSR)

PRESENTED: January 7, 1958, by A. I. Oparin, Member, Academy of Sciences, USSR

SUBMITTED: January 6, 1958

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17(4) SOV/20-126-4-50/62

AUTHORS: Kosikov, K. V., Rayevskaya, O. G.

TITLE: The Inhibitory Effect of Controlled Mutational Variation of Fermentative Properties of Yeasts (Effekt tormozheniya napravlennoy mutatsionnoy izmenchivosti fermentativnykh svoystv drozhzhey)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 4, pp 870 - 873 (USSR)

ABSTRACT: In a previous paper (Ref 1), the authors proved the possibility of speeding up the variation mentioned in the title. This was achieved by raising the concentration of the corresponding sugar (of the specific nutrient medium). The resulting variations may be regarded as mutational variations. The authors carried out 5 experiments, and proved the inhibitory effect of the maltose on the adaptation process of the yeast fungi to the saccharose fermentation. This effect may be explained by the higher ability of the maltose of penetrating into the interior of the cell, and of blocking the corresponding protoplast reactions which are connected with the origin of the reproduction power of the invertase. The same applies to lactose, but to a lower

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extent. The cells accustomed to the saccharose fermentation were tested, in the mentioned 5 experiments, for the constancy of this new property acquired by them at the sexual propagation. 29 4-spore askes from 9 adapted cultures were investigated in total. 27 of them produced a cleavage of 2:2, i.e. 2 cultures grown from single spores intensively fermented the saccharose whereas the 2 remaining did not ferment at all and behaved like the original (not adapted) cells. These indications show that the fermentative properties newly originated in the cells are inherited like constant mutational variations. In fact, this is a controlled mutational variation of the fermentative properties of yeast fungi under the influence of a specific nutrient medium (here saccharose). The experimental results show that not only a controlled mutational process with respect to the characteristic in question can be generated , and accelerated by a rise in concentration of the saccharose in the solution, but that the process can also be inhibited or interrupted by the admixture of another carbohydrate (maltose) to the nutrient medium. There are 1 figure, 1 table, and 2 references, 1 of which is Soviet.

The Inhibitory Effect of Controlled Mutational Variation SOV/20-126-4-50/62
of Fermentative Properties of Yeasts

ASSOCIATION: Institut genetiki Akademii nauk SSSR (Institute of Genetics of the Academy of Sciences, USSR)

PRESENTED: March 11, 1959, by V. N. Shaposhnikov, Academician

SUBMITTED: March 10, 1959

Card 3/3

KOSIKOV, K.V.; PAYEVSKAYA, O.G.

Hybridization of strains of distillery yeast. Trudy Inst.gen. no.35:47-58 '65. (MIRA 18:12)

KOSIKOV, K.V.; RAYEVSKAYA, O.G.; KONOVALOV, S.A.; GOLUBENKOVA, N.I.; VASILENKO, T.V.

Yeast hybrid increasing the yield of alcohol in the process of the fermentation of molasses. Mikrobiologiia 32 no.6:1052-1058 N-D '63 (MIRA 18:1)

1. Institut genetiki AN SSSR.

KONOVALOV, S.A.; RAYEVSKAYA, O.G.; KOSIKOV, K.V.

Yeast hybrides used for raffinose fermentation and their application in the distilling industry. Ferm. i spirt. prom. 30 no.1: 8-11 '64. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i spirtovoy promyshlennosti (for Konovalov). 2. Institut genetiki AN SSSR (for Rayevskaya, Kosikov).

KOSIKOV, K.V.; RAYEVSKAYA, O.G.

Role of the concentration of a specific substrate inducing controlled hereditary changes in the fermentative properties of yeast. Agrobiologiia no.6:827-830 N-D '63.
(MIRA 17:2)

1. Institut genetiki AN SSSR.

KOSIKOV, K.V.; RAYEVSKAYA, O.G.; STRESHINSKAYA, G.M.

Multiplication speed of yeast cells in experiments on controlled variability with various carbohydrate concentrations in the medium. Trudy Inst. gen. no.29:366-372 '62. (MIRA 16:7)

(Variation(Biology)) (Yeast)

RAYEVSKAYA, O. G., and KOSIKOV, K. V.,

"Directed Hereditary Changes of Fermentative Properties of Yeast and Indirect Selection."

report submitted for the 11th Intl. Congress of Genetics, The Hague, Netherlands, 2-10 Sep 63

KOSIKOV, K.V.; RAYEVSKAYA, O.G.; TSAY-TSZIN'-KO [TS'ai Chin-k'uo]; STRESHINSKAYA, G.M.

Invertase activity of yeast experimentally adapted to sucrose fermentation. Trudy Inst. gen. no.28:228-234 '61. (MIRA 14:11)
(YEAST) (INVERTASE) (SUCROSE)

KOSIKOV, K.V.; RAYEVSKAYA, O.G.

Effect of ionizing radiations on the mutagenic adaptation of yeasts to sucrose fermentation. Mikrobiologiia 30 no.5:890-896 S-O '61. (MIRA 14:12)

1. Institut genetiki AN SSSR.
(SACCHAROMYCES GLOBOSUS)
(X RAYS—PHYSIOLOGICAL EFFECT)
(SUCROSE)

KOSIKOV, K.V.; RAYEVSKAYA, O.G.

Possibility of accelerating and inhibiting conrolled heritable variations in the fermentation properties of yeast. Trudy Inst. gen. no. 27:99-107 '60. (MIRA 13:12)
(YEAST) (ADAPTATION (BIOLOGY))

. RAEVSKAYA, R. G.

USSR /Microbiology. Medical and Veterinary Microbiology. F-6

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35774

Author : Popov, I.S.; Raevskaia, R.G.; Gorokhova, E.L.

Title : Towards an Experimental Study of Blastomycosis

Orig Pub: V sb.; Eksperim. i klinich. issledovaniia II, L, 1956, Medgiz, 216-217

Abstract: Experiments were conducted on rabbits and mice into which a suspension of yeastlike fungi was injected subcutaneously and intradermally. In a single injection the fungus survived in the organism as a saprophyte, but necrosis appeared only at the place of injection, healing without a scar. The fungus was extracted from the place of injection and from punctations of the internal

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Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35774

organs in a series of cases. Repeated infections increased the sensitivity of the animal, at the place of injection an inflammatory reaction developed, and in the internal organs in a series of cases conglomerative tumors and tubercular oozings developed; the fungus C.albicans was extracted from all the foci of infection. With the sensibilization of the animals with horse serum there appeared on the place of infection tumors from which the fungus was isolated. It was also extracted from the internal organs, in which no pathological changes were noted. The action on the nervous system by various irritants (the repeated injections of turpentine and oil under the skin, immersion in cold water, accom-

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Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35774

panied by audible irritants) was not reflected on the sensitivity of the animals.

[redacted]

Invisible helpers of physicians. Un.nat. no.7:30-32 J1 '57.
(MIRA 10:8)

(Radioisotopes)

1. RAYEVSKAYA, S.

2. SSSR (600)

4. Ukraine-Fertilizers and Manures

7. Effective use of fertilizers in cotton-and-grain crop rotations in the Ukraine.
Khlopkovodstvo No. 9, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

1. RAYEVSKAYA, S.

2. SSSR (600)

4. Ukraine-Cotton Growing

7. Effective use of fertilizers in cotton-and-grain crop rotations in the Ukraine. Khlopkovodstvo No. 9, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

1. RAYEVSKAYA, S.

2. USSR (600)

4. Cotton Growing - Ukraine

7. Effective use of fertilizers in cotton-and-grain crop rotations in the Ukraine, Khlopkovodstvo, No. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

1. RAYEVSKAYA, S.

2. USSR (600)

4. Fertilizers And Manures-Ukraine

7. Effective use of fertilizers in cotton-and-grain crop rotations in the Ukraine., Khlopkovodstvo, No.9, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953.Unclassified

RAYEVSKAYA, S. A. Cand Med Sci -- "On ~~the~~ methods of treating polycythemia. Experience the administration of radioactive phosphorus." Mos, 1960 (Min of Health USSR. Central Inst for the Advanced Training of Physicians). (KL, 1-61, 210)

[illegible] FD 216

USSR/Medicine - Radiology

Card 1/1

Author : Domshlak, M. P.; Grigor'yev, Yu. G.; Rayevskaya, S. A.

Title : Experiment on treating polycythemia with radioactive phosphorus

Periodical : Vest Rent. i Rad. 56-63, Mar/Apr 1954

Abstract : Radioactive phosphorus taken orally, does not have side effects. The optimum dose taken over a period of a month is considered to be six millicuries, although smaller amounts can be taken with success. Remission commences within 2-3 months after administering the radioactive phosphorus and continues for 2 1/2 years. Seven references; three USSR. Four tables.

ACC NR: AT6036541

irradiation to evaluate the space radiation hazard on brief flights. Experimental studies on large laboratory animals were used to establish a basis for permissible doses during lunar flight. This method permitted evaluation of the character and degree of radiation injuries from gamma and proton irradiation in the dose range to be encountered during lunar flight. In addition, clinical observations of people subjected to local irradiation for cancer treatment were analyzed. A classification of regulated doses for brief spaceflights was made on the basis of this material. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06, 18, 22 / SUBM DATE: 00May66

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